



Mathematical Practices:

1. Make sense of problems and persevere in solving them;
2. Reason abstractly and quantitatively;
3. Construct viable arguments and critique the reasoning of others;
4. Model with mathematics;
5. Use appropriate tools strategically;
6. Attend to precision;
7. Look for and make use of structure;
8. Look for and express regularity in repeated reasoning.

Content Standards

K Counting & Cardinality: Know number names and the count sequence; Count to tell the number of objects; Compare numbers;

Operations & Algebraic Thinking: Understand addition, and understand subtraction

Numbers & Operations in Base Ten: Work with numbers 11-19 to gain foundations for place value

Measurement & Data: Describe and compare measurable attributes; Classify objects and count the number of objects in each category.

Geometry: Identify & describe shapes; Analyze, compare, create, and compose shapes.

1st Operations & Algebraic Thinking: Represent and solve problems involving addition and subtraction; Understand and apply properties of operations and the relationship between addition and subtraction; Add and subtract within 20; Work with addition and subtraction equations.

Numbers & Operations in Base Ten: Extend the counting sequence (to 120); Understand place value; Use place value understanding and properties of operations to add and subtract.

Measurement & Data: Measure lengths indirectly and by iterating length units; Tell and write time; Represent and interpret data.

Geometry: Reason with shapes and their attribute.

2nd Operations & Algebraic Thinking: Represent and solve problems involving addition and subtraction; Add and subtract within 20; Work with equal groups of objects to gain foundations for multiplication;

Numbers & Operations in Base Ten: Understand place value; Use place value understanding and properties of operations to add and subtract

Measurement & Data: Measure and estimate lengths in standard units; Relate addition and subtraction to length; Work with time and money; Represent and interpret data.

Geometry: Reason with shapes and their attributes

3rd Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division; Understand properties of multiplication and the relationship between multiplication and division; Multiply and divide within 100; Solve problems involving the four operations, and identify and explain patterns in arithmetic

Common Core State Standards – Math

<http://www.k12.wa.us/CoreStandards/Mathematics/>

2015

Number & Operations in Base Ten: Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number & Operations - Fractions: Develop understanding of fractions as numbers.

Measurement & Data: Solve problems involving measurement and estimation; Represent and interpret data; Geometric measurement: understand concepts of area and relate area to multiplication and to addition; Geometric measurement: recognize perimeter.

Geometry: Reason with shapes and their attributes.

4th Operations & Algebraic Thinking: Use the four operations with whole numbers to solve problems; Gain familiarity with factors and multiples; Generate and analyze patterns.

Number & Operations in Base Ten: Generalize place value understanding for multi-digit whole numbers; Use place value understanding and properties of operations to perform multi-digit arithmetic;

Number & Operations – Fractions: Extend understanding of fraction equivalence and ordering; Build fractions from unit fractions; Understand decimal notation for fractions, and compare decimal fractions.

Measurement & Data: Solve problems involving measurement and conversion of measurements; Represent and interpret data; Geometric measurement: understand concepts of angle and measure angles.

Geometry: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

5th Operations & Algebraic Thinking: Write and interpret numerical expressions; Analyze patterns and relationships.

Number & Operations in Base Ten: Understand the place value system; Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number & Operations – Fractions: Use equivalent fractions as a strategy to add and subtract fractions; Apply and extend previous understandings of multiplication and division.

Measurement & Data: Convert like measurement units within a given measurement system; Represent and interpret data; Geometric measurement: understand concepts of volume.

Geometry: Graph points on the coordinate plane to solve real-world and mathematical problems; Classify two-dimensional figures into categories based on their properties.

6th Ratios & Proportional Relationships: Understand ratio concepts and use ratio reasoning to solve problems.

The Number System: Apply and extend previous understandings of multiplication and division to divide fractions by fractions; Compute fluently with multi-digit numbers and find common factors and multiples; Apply and extend previous understandings of numbers to the system of rational numbers.

Expressions & Equations: Apply and extend previous understandings of arithmetic to algebraic expressions; Reason about and solve one-variable equations and inequalities; Represent and analyze quantitative relationships between dependent and independent variables.

Geometry: Solve real-world and mathematical problems involving area, surface area, and volume.

Statistics & Probability: Develop understanding of statistical variability; Summarize and describe distributions.

7th Ratios & Proportional Relationships: Analyze proportional relationships and use them to solve real-world and mathematical problems.

The Number System: Apply and extend previous understandings of operations with fractions.

Expressions & Equations: Use properties of operations to generate equivalent expressions; Solve real-life and mathematical problems using numerical and algebraic expressions and equations

Geometry: Draw construct, and describe geometrical figures and describe the relationships between them; Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Statistics & Probability: Use random sampling to draw inferences about a population; Draw informal comparative inferences about two populations; Investigate chance processes and develop, use, and evaluate probability models.

8th The Number System: Know that there are numbers that are not rational, and approximate them by rational numbers.

Expressions & Equations: Expressions and Equations Work with radicals and integer exponents; Understand the connections between proportional relationships, lines, and linear equations; Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions: Define, evaluate, and compare functions; Use functions to model relationships between quantities.

Geometry: Understand congruence and similarity using physical models, transparencies, or geometry software; Understand and apply the Pythagorean Theorem; Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

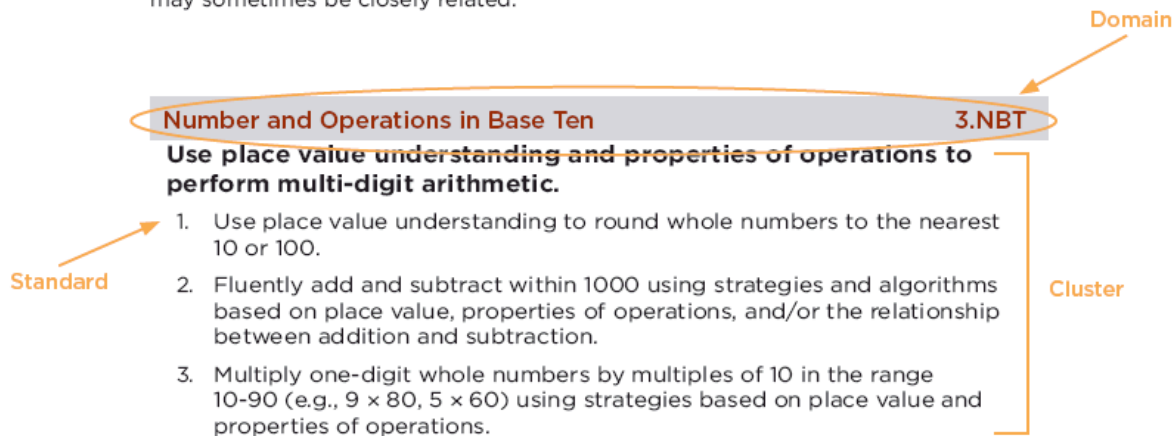
Statistics & Probability: Investigate patterns of association in bivariate data.

How to read the grade level standards

Standards define what students should understand and be able to do.

Clusters are groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject.

Domains are larger groups of related standards. Standards from different domains may sometimes be closely related.



The Common Core Standards are here: <http://www.corestandards.org/>

The Common Core State Standards were to be fully implemented in Washington State in the 2014-2015 school year.